statements published concerning its operation by various writers, and partly to the difference in its effects in the Eastern hemisphere compared with those observed in Europe. The Indian hemp of India and that grown in Europe present the same external form, but they differ in the relative proportion of narcotic resin which each contains, and which is the active principle of the plant. It appears that the amount of resin depends not only upon differences of latitude, but also upon the depression or elevation of the regions where the plant is grown. Chemical analysis has discovered that the Indian hemp contains gum, bitter extractive matter, albumen, chlorophyll, ethereal oil, and a peculiar resin. This resin is called *cannabin* by some writers, and forms six to seven per cent. of the dried plant. The ethereal oil has been obtained by Martius only in small quantity; it is of a slightly yellowish colour, of a peculiar ethereal camphor-like smell, and an aromatic astringent, and afterwards bitter taste. The preparations of Indian hemp hitherto employed are the powdered plant for pills or powders, resinous extract of hemp in powders or pills, tincture of the resin, and emulsion.

With regard to its application to the practice of medicine, Indian hemp may be considered valuable as a tranquillizing antispasmodic drug. It has been employed with favourable results in tetanus and trismus, cardialgia, rheumatism, and in some mental diseases. Of 1000 cases in which this drug was administered by Dr. Fronmüller, 552 were males and 448 females, and the patients were of various ages, from one year to fifty and more. The principal diseases of the patients were tuberculosis, inflammation, surgical diseases, rheumatism, diseases of the eyes, nervous diseases, and dropsy. The greater part of the cases were treated by the spirituous extract prepared by Merk in Darmstadt; but others were treated by the extract prepared by the late Jacob Bell, of London. It is to be observed that all the observations were made on cases in which there had been no sleep for several nights, and in which the continuance of sleeplessness was to be anticipated unless some narcotic was employed.

Out of the thousand cases it was found that the narcotic property of the hemp was completely developed in 530, partially in 215, and little or not at all in 255. With the extract of Indian hemp the best effects were produced 145 times with a dose of 12 grains, 64 times with a dose of 8 grains, 63 times with a dose of 10 grains, 35 times with 16 grains, 22 times with 3 grains, 17 times with 2 grains, 15 times with 14 grains, 14 times with 20 grains, 13 times with 6 grains, 12 times with 5 grains. The period of falling to sleep, and the duration of sleep in the cases, are numerically recorded by Dr. Fronmüller, and also the number of cases in which unfavourable results ensued on the day of taking the drug, or on the next morning. Comparative observations were also made with morphia in cases where the Indian hemp had failed. Out of 29 cases in which Indian hemp had produced no effect, sleep was produced by morphia in 24. The dose of morphia was in general rather a strong one—from one-sixth of a grain to 2 grains—in order to induce sleep. In the remaining 5 cases the morphia produced no effect.

The conclusions to which Dr. Fronmüller arrives as the results of his observations are the following: 1. That Indian hemp, among all the known medicines which cause stupefaction, is that which produces a narcotism most completely supplying the want of natural sleep, without occasioning any great excitement of the vascular system, without special stoppage of the secretions, without the supervention of unfavourable consequences, and without subsequent paralysis. 2. That Indian hemp, on the other hand, is not so strong nor so certain in its operation as opium. 3. That Indian hemp may given in all acute inflammatory diseases and in typhus fever. 4. That it is worth a trial to alternate the Indian hemp with opium in cases where the latter fails. 5. That the best mode of administration is the alcoholic extract in small pills which contain an addition of the powder of the Indian hemp. The lowest dose for producing sleep may be estimated as eight grains given in pills of one grain each.—*B. and F. Med.-Chir. Rev.*, 1861, from *Vierteljahrschrift für die practische Heilkunde*, 1860.

[It is proper to add a caution in regard to such large doses. If the extract be of the *best quality*, eight grains might not always be a safe dose.—ED.]

5. *Oil of Turpentine as an Anæsthetic.*—Mr. JOHN WILMSHURST, in a communication in the *Lancet* (March 2, 1861), states that he has successfully

employed the ol. terebinthinæ rect. as an anæsthetic. The first case, he says, "in which I tried its effects was that of Mrs. H——, matron on board the emigrant ship *Indiana*, of which I was then surgeon-superintendent. About twelve months ago, having exhausted my little stock of chloroform, and the patient suffering from violent neuralgia in the course of the supra-orbital nerve, it occurred to me that of the remedies at hand the most likely would be the vapour of turpentine. This I immediately applied, sprinkled on a handkerchief, to the nostrils, similarly to chloroform, and was surprised to find it not merely soothe and allay the pain, but, after a few inhalations, produce a gentle sleep and state of anæsthesia, from which she awoke without any headache or other unpleasant symptoms, and quite free from pain.

"I may mention, without going into detail, that I have since tried it in one or two slight but painful operations—as extracting a broken needle from a sensitive part, and in some cases of cramps, convulsions, nephralgia calculosa, &c. Its effect seems to be to allay nervous irritation, spasm, and pain, without deranging the action of the heart, and to produce a calm anæsthetic sleep."

6. *On the Therapeutical Employment of the Double Iodide of Iron and Quinine.*—Dr. Violette has given the double iodide of iron and quinine in several affections in which the preparations of iron have been recommended, and he has been enabled to prolong its use without meeting with the symptoms so often produced by the separate use of iron and quinine. He has never observed either weight at the stomach or offensive eructations, or gastralgia. In many affections of the uterus, after the local treatment has succeeded, the iodide of iron and quinine has seemed to restore the strength and revive the appetite. He has witnessed the same results in convalescence from typhoid fever, and from all diseases which induce a considerable impoverishment of the blood. Dr. Violette considers this medicine peculiarly efficacious in chlorosis. M. Becquerel allowed him to administer it to some young chlorotic girls, whose leading symptoms were complete loss of colour of the mucous membranes, a waxy complexion, excessive weakness, total loss of appetite, blowing murmur in the heart and carotids; in such cases Dr. Violette found that a rapid improvement followed the use of the double iodide. The appetite returned very quickly, and at the same time the strength was restored; a slight rose colour replaced the pale tint of the mucous membrane, and the extreme paleness of the face was changed for the natural colour.—*B. and F. Med.-Chir. Rev.*, Jan., 1861, from *Gazette des Hôpitaux*, July, 1860.

7. *Kukui or Kekune Oil.*—Now that the oil of *Aleurites triloba* is spoken of so highly in France as a purgative oil, a few particulars concerning it may not prove uninteresting.

The plant producing the fruits from whence this oil is extracted, belongs to the natural order Euphorbiaceæ, and is plentiful in the Sandwich, Society, and other groups of islands in the Southern Seas. It is also to be met with in some parts of Jamaica and the East Indies. The oil has been for some time known in Jamaica as Spanish walnut oil, and in India as Belgaum walnut oil. In Ceylon the oil is called kekune oil, and in the Sandwich Islands kukui oil. The tree is known in some parts of Polynesia as the candle nut tree. The fruits are nearly as large as a walnut, and the kernel is inclosed in a thick, hard shell. These nuts are often strung together by the natives, and burnt, without any other preparation, as torches. In the history of the Mutiny of the Bounty it is stated, that the rooms in Pitcairn's Island were lighted up by torches made of "doodoe" nuts, strung upon the fibres of the palm leaf, forming a good substitute for candles. These nuts are also so strung and used by the San Blas Indians in Central America, and a child is in attendance to knock off each nut as it becomes burnt out.

The following is the method adopted in obtaining the oil in Jamaica. Each nut is carefully cracked or broken, and the kernel as carefully separated from the hard shell, lest the latter, having a brown dye quality, should affect the colour of the oil. The kernel is then put into a large mortar and pounded as fine as possible. It is afterwards thrown into a caldron with plenty of water